

Among a large number bred, the males were nearly constant in their markings, varying slightly in the size of the spots near the outer margin of the hindwings and occasionally with the beginning of a transverse line inside the first one on the forewings, shown by a little bending in of the pale on the costal margin so as to sometimes touch the subcostal vein. Some of the females were of this type, but many of them varied from this by having less of the pale colour on the forewings, even to the partial or total obliteration of the inner of the two transverse lines. The tendency with such examples would be to a blending and enlarging of the black spots on the terminal border of the hindwings, and a blending of these with the black of the edge, making a nearly solid terminal border. The red on the hindwings was constant, there being no appreciable difference in this respect between the sexes, as there is in *Nais*, nor in light or dark examples of either sex. The dark examples would have the black on the abdomen a little more prominent than on the light. The characteristic marks, straight transverse lines on forewings and veins pale, were constant whatever the other variations might be. In size, my specimens were small from being underfed, as a result of a great many larvæ crowded together in a single breeding cage. If they had been separated as much as they naturally would be in feeding in the open fields they would have been as large as caught specimens.

TWO NEW SPECIES OF CANADIAN PIMPLINÆ.

BY W. HAGUE HARRINGTON, OTTAWA.

Xorides caryæ, n. sp.

Female.—Length 11 to 16 mm. Black with yellowish-white markings. Head swollen, interior orbits, interrupted opposite antennæ, and palpi white; face below antennæ punctured, between antennæ and ocelli polished; antennæ slender, black. Thorax with the pectus and pleuræ finely punctate, polished; disc of mesothorax transversely rugulose; metathorax rounded, faintly sulcate medially and rugosely punctured and aciculated; sides of prothorax, two lines on mesothorax, two spots, sometimes confluent, on scutellum, the post-scutellum, the tegulæ and a broad stripe on pleura, continued on middle coxa, yellowish-white; legs, including coxæ, pale rufous or honey-yellow, anterior ones paler, the anterior coxæ, stripe on middle coxæ outwardly, second joint of trochanters and the knees yellow; tibiæ and tarsi piceous or blackish, the former with a

pale line within ; wings hyaline, nervures and stigma black. Abdomen with first segment rugosely sculptured, the segments becoming smoother toward apex of abdomen ; incisures of joints whitish, venter banded with white ; ovipositor 8 mm. in length, or hardly as long as abdomen.

Male.—Differs from female as follows : Face below antennæ and the scape beneath yellow ; anterior coxæ and most of prothorax below yellow ; abdomen long, slender and polished, with the tip of segments narrowly white. Length 16 mm.

Described from 4 ♀ and 2 ♂ taken in June and July on felled bitter-hickory (*Carya amara*). The females were ovipositing, and probably are parasites of *Saperda discoidea* or *Dorchaschema nigrum*.

The American species, all of which occur in Canada, may be tabulated as follows :—

Abdomen entirely black..... *X. occidentalis*, Cress.

Abdomen with white markings ;

Ovipositor long..... *X. vittifrons*, Cress.

Ovipositor short,

Pleura black..... *X. borealis*, Cress.

Pleura with white band..... *X. caryæ*, n. sp.

Xorides canadensis, Prov. (Nat. Can., VII., 248), = *Xylonomus albopictus*, Cress.

Xorides vittifrons, Cress., has been found in about the same numbers, as *X. caryæ*, but upon old maples infested with *Dicerca divaricata*, *Xiphydria albicornis*, *Tremex columba*, etc.

Xorides borealis, Cress., was described from Hudson Bay region ; a ♀ which I refer to this species differs from the original description in having the posterior femora rufous instead of black.

Xorides occidentalis, Cress., is found in Vancouver Island.

Xylonomus canadensis, n. sp.

Female.—Black ; length 22 to 26 mm ; expanse of wings 30 to 33 mm. Head large, face and vertex rugulose, cheeks aciculated, clypeus small with sutures obscurely rufous ; antennæ with annulus on joints 10-14. Thorax subopaque above and strongly punctured, pleura and pectus coarsely punctured but shining ; mesothorax flattened or slightly depressed medially, aciculated and with slight median carina ; scutellum punctured, shining ; metathorax with two discal carinæ enclosing a narrow oval area, lateral carinæ indistinct except at base near spiracles ; rugosely punctate and with small posterior tubercles ; legs black, knees white, four anterior

tarsi white with terminal joint black, posterior tarsi with terminal joint black, base of first white, remainder piceous; wings faintly clouded, stigma, except white spot at base, and nervures black. Abdomen opaque, with first segment suddenly widened and sides subparallel beyond spiracles, basal segments rugulose, with margins polished, becoming smoother toward apex; ovipositor as long as body, rufous, sheaths black.

Male.—Length 17 to 20 mm.; expanse of wings 24 mm. Differs from female in having antennæ entirely black and more slender, and the anterior tibiæ have a white line externally.

Described from 4 ♀ and 2 ♂ captured at intervals since 1878 on fences, bridges, etc.

This species looks very much like *X. stigmaferus*, Say (and a specimen was so determined for me by Provancher), but is abundantly distinct by its stouter abdomen and differently coloured tarsi, and its more robust and opaque appearance.

The American species may be tabulated as follows:—

Prothorax above with lateral tubercles;

Wings with a fuscous band.....*X. australis*, Cress.

Wings hyaline, legs black.....*X. Rileyi*, Ashm.

Wings hyaline, legs partly red.....*X. humeralis*, Say.

Prothorax above without tubercles;

Abdomen with lateral white spots.....*X. albopictus*, Cress.

Abdomen with tips of segments white.....*X. insularis*, Cress.

Abdomen entirely black,

Legs entirely black.....*X. cincticornis*, Cress.

Legs black and white.

First segment of abdomen slender...*X. stigmaferus*, Say.

First segment of abdomen stout....*X. canadensis*, n. sp.

Legs ferrugineous.....*X. frigidus*, Cress.

Abdomen rufous,

Pleura red.....*X. pulcher*, Ashm.

Pleura black.....*X. calidus*, Prov.

Uniformly ferrugineous....*X. californicus*, Cress.

Obscure rufous, legs black.....*X. floridanus*, Ashm.

The following are the species recorded from Canada: *albopictus* (Ont. and Que.), *calidus* (Ottawa), *frigidus* (Hud. Bay), *humeralis* (Ont. and Que.), *insularis* (V. I.), *stigmaferus* (Ont. and Que.), *canadensis* (Ottawa).

Provancher described *calidus* from a specimen which I sent to him, and although I cannot now remember the insect, the description shows that it is very close to the species since described by Ashmead as *pulcher*. Perhaps the latter may be only a variety.

NEMATUS PALLIDIVENTRIS, FALLEN—A FRESH IMPORTATION.

BY REV. THOMAS W. FYLES, SOUTH QUEBEC.

In September of last year I discovered the larvæ of a species of *Nematus* feeding upon a willow introduced from Russia by the late Mr. Charles Gibb. Like others of the genus these larvæ were gregarious and threw up the hinder parts of the body when disturbed. They were full fed and buried themselves on September 24th. The flies appeared in the end of March. The following is a description of the insect :—

Full-grown larva.—One inch long; head dark brown; body pale green above with numerous black dots, pale greenish-yellow underneath; anal segment yellow.

Pupa.—Enclosed in a dark brown cocoon, less compact than that of *N. Erichsonii*.

Imago.—Length of body four lines; expanse of wings six and a-half lines; head and thorax black; antennæ brown; ocelli prominent, stand out like black heads; legs honey-yellow, tarsi of hind legs brown; abdomen pale orange, with a dorsal line of triangular spots—a spot to a segment—the obtuse angle of one spot approaching the middle of the base of the next, and so on to the end.

I submitted the perfect insects to the Reverend Abbé Provancher, and he has kindly informed me that after careful examination, and comparison of them with specimens of his own collection, he has come to the conclusion that the species is *Nematus pallidiventris*, Fallen, of Sweden, France, etc., and that it is a new addition to our Hymenopterous fauna. The insect, he says, is very near to several of our American species but identical with none.

Should this new importation become established in this country, it will be interesting to watch its progress.